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I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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OWNING AND OPERATING COSTS OF MOTORCYCLE IN MALAYSIA

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ABSTRAK

Projek ini adalah kajian tentang kos memiliki dan motosikal di Malaysia. Di dalam kajian ini, kaedah yang telah dilakukan adalah dengan memasukkan segala maklumat dan data yang diperoleh daripada soal selidik yang telah diedarkan ke dalam Microsoft Excel untuk mendapatkan kos per kilometer yang digunakan setiap tahun bagi setiap motosikal. Pengumpulan data terdiri daripada pelbagai jenis motosikal, kapasiti bagi sesebuah motosikal, tahun mengeluarkan dan kilometer yang digunakan untuk motosikal tersebut. Jadi, daripada data yang telah dikumpul, analisis telah dilakukan dan memperoleh jumlah kos pemilikan dan kos operasi motosikal. Data yang terkumpul merupakan data yang diambil daripada kalangan pelajar di UMP dan orang yang menggunakan motosikal di seluruh Malaysia. Akhir sekali, sebagai kesimpulan, kos memiliki dan kos operasi motosikal bergantung kepada jenis motosikal yang digunakan, kapasiti enjin yang digunakan, harga terkini minyak petrol dan jumlah kilometer yang telah digunakan bagi sesebuah motorsikal.

ABSTRACT

This project is a researched about Owning and Operating Cost of Motorcycles in Malaysia. In case study, a method of study has been done, which is to key-in the data collected from questionnaire that has been distributed into Microsoft Excel to get the kilometre used per year for every motorcycles. The data collection consists of various type of motorcycles, capacity engine of motorcycles, year of manufactures and kilometre used for motorcycles. So, from the data collected, the results and analysis were obtained which are the total cost of owning and operating cost of motorcycles. Besides that, the data were collected among the student in UMP and people that using motorcycles around Malaysia. Last but not least, as a conclusion, Owning and operating cost of motorcycles is depending on type of motorcycles used and capacity of engine used.

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LIST OF SYMBOLS

LIST OF ABBREVIATIONS

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Transportation Industry is one of the most important industries that provide income for country development. Transport can be divided into different modes which are air, water, and land transport, which includes rail road and off-road transport. In that mode, a motorcycle is classified into land transport. Motorcycle is one of the major modes for daily traffic that mainly used to travel several parts around Malaysia. The used of motorcycles is not only to travel, but motorcycles also have been used by Malaysian people to do their daily routine such as go to work or college.

Compared to the public transport, public transport is a shared passenger-transport service which is available for use by the general public, as distinct from modes such as taxi cab, carpooling, hired buses, and transportation network companies, which are not shared by the general public without private arrangement. Public transport modes include city buses, trolley buses, trams and passenger trains, rapid transit and ferries.

People in Malaysia prefer to use motorcycles as their main transport. The reason of using a motorcycle is because of the lower purchase and operating cost of motorcycles. Besides, the size of motorcycles also small compared to the cars which can ease traffic movement and parking area. That is the several reasons Malaysian prefer to use motorcycles as their main transport.

NEGERI State	MOTOSIKAL Motorcycle	MOTOKAR Motorcar	BAS Bus	TEKSI Taxi	KERETA SEWA PANDU SENDIRI Hire & Drive Car	KENDERAAN BARANG-BARANG Goods Vehicle	LAIN-LAIN Others	JUMLAH Total
PERLIS	78,263	23,868	176	126	79	1,998	2,281	106,791
KEDAH	895,435	320,739	2,956	2,331	1,384	40,025	30,947	1,293,817
PULAU PINANG	1,346,531	1,081,715	5,164	3,784	1,735	78,180	39,626	2,556,735
PERAK	1,308,482	736,210	4,699	3,665	878	76,011	60,190	2,190,135
SELANGOR	1,342,398	1,085,737	6,773	15,322	2,202	188,492	138,808	2,779,732
W.P. KUALA LUMPUR	1,770,360	3,720,213	19,002	55,371	46,331	268,007	238,654	6,117,938
NEGERI SEMBILAN	531,677	329,952	2,483	1,933	564	48,687	16,471	931,767
MELAKA	449,980	328,242	1,692	1,558	434	28,352	14,092	824,350
JOHOR	1,786,021	1,420,665	8,712	12,624	2,758	150,258	97,921	3,478,959
PAHANG	569,530	365,682	1,967	1,892	982	46,415	28,945	1,015,413
TERENGGANU	369,304	199,191	1,069	927	328	22,230	13,451	606,500
KELANTAN	524,619	291,052	2,020	1,522	587	29,885	16,657	866,342
SABAH	362,369	614,021	7,169	4,629	3,908	123,376	99,434	1,214,906
SARAWAK	754,778	747,282	3,117	2,436	1,700	94,912	100,888	1,705,113
PORTAL RAKAN NIAGA	5,043	607,127	0	29	15	1,159	81	613,454
MALAYSIA	12,094,790	11,871,696	66,999	108,149	63,885	1,197,987	898,446	26,301,952

Figure 1.1 Total vehicles by type and state in Malaysia, 2015

Source: Transport Statistic Malaysia 2015

Study on case relating to motorcycle ownership is still comparatively new especially in Malaysia. However, there have been study handle across the world on vehicle ownership such as the study on the effect of modal shift to motorcycles particularly from cars on congestion and network performance conducted by the U.K. Department of Transport (DfT) and Transport for London (TfL) in year 2001. The study involved the development of both the motorcycle ownership models and motorcyclist mode-choice models. The important descriptive factors in the motorcycle ownership models are gender, age, personal income, car ownership, family structure, motorcycle purchase cost and location of residents.

1.2 Problem Statement

Most of the people that have their own transport did not consider the real cost of owning a transport carefully. Most of Malaysian only considered the cost of fuel they spend every day. Therefore, this case study is carried out for the purpose of knowing the exact amount of costs accepted by the user of motorcycles in Malaysia. People also can know the exact cost per kilometre for owning and operating motorcycles.

1.3 Objectives

To study on:

- 1) To analyse the owning and operating costs of motorcycles
- 2) To compare travel cost by motorcycles and public transport

1.4 Scope of Study

This study involves all motorcycle users in Malaysia especially student of Universiti Malaysia Pahang (UMP). The data calculation is about owning and operating cost of motorcycle which consists of:

- 1) Brand of the motorcycle
- 2) Capacity engine of motorcycles
- 3) Year of manufacture
- 4) Total kilometre used
- 5) Price of bus ticket

1.5 Significant of Study

If Malaysian people know the exact cost of owning and operating of motorcycles, they can make a comparison with the cost of using a public transport such as Rapid Kuantan bus for near area or long distance public transport such as Cepat Express Bus. From that, they can make a better selection to reduce their cost.

Due to the increasing of cost living in Malaysia, the results from this case study can be used as a reference in helping Malaysians to know the exact amount of money that has been spent to their motorcycle. This study also can determine the cost per kilometre used for motorcycles. With that, the results of this case study can be used to persuade people to switch to public transport for most of their daily activities requiring transportation.

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